Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: XTO Energy, Inc.
Well Name/Number: Headington 43X-25B
Location: NE SE Section 25 T26N R52E
County: Richland**, MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 25-35 days drilling time.
Unusually deep drilling (high horsepower rig): Triple derrick rig 1000 HP to drill a single lateral horizontal Bakken Formation well, 18,750'MD/8,824'TVD.
Possible H2S gas production: Slight possibility of H2S gas production, Mississippian Formations.
In/near Class I air quality area: Closest, class I air quality area in the area of review is the Fort Peck Indian Reservation about 9 to 10 miles to the northwest from this drilling location.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:
_X_ Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____

Comments: If there are existing pipeline for H2S gas in the area then gas must be tied into system or if no gathering system nearby H2S gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)
Salt/oil based mud: Yes, to long string/intermediate casing hole will use oil based invert drilling fluids. Horizontal lateral to be drilled with brine water, from the 7" intermediate casing shoe to the 18,750'MD TD. Surface casing hole will be drilled with freshwater and freshwater mud.
High water table: No, high water table anticipated at this location.
Surface drainage leads to live water: No, closest drainages are unnamed ephemeral tributary drainages, to West Charlie Creek, about adjacent to the southwest corner of this location, about 1/8 of a mile to the east and about ½ of a mile to the south from this location.
Water well contamination: No, closest water wells are about 1mile and further from this location to the southwest from this location. The wells are domestic and stock water wells, from 240' to 231' in depth. Operator will drill a 1030'+ surface hole with freshwater and freshwater mud system and set 1030' of surface casing cemented to surface to protect groundwater.
Porous/permeable soils: No, sandy silty clay soils.
Class I stream drainage: No, Class I stream drainages.

Mitigation:
_X_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____

Comments: 1030' surface casing well below freshwater zones in adjacent water wells, covering the base of the Fox Hills aquifer. Adequate surface casing and operational BOP equipment will prevent